

Assessment of Care Provided by Family Caregivers for Post Stroke Patient at Home

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Background, Stroke is a scientific emergency, for people experiencing a stroke, the difference between recovery and disability or loss of life is measured in hours, rehabilitation clinician to be familiar with stroke, information a way to understand and manage the acute stroke further to having the capability to provide evaluation and personal own family members. **The aim** was to assess care provided by family caregivers for post stroke patient at home. **Design**: Descriptive research design was used. **Setting**: This study was conducted at the stroke neurological departments and the neurological outpatient clinic at Minia University Hospital. **Sample**: A purposive sample of 180 cases within six months (from first July to the end December 2020), it was completed with care givers at home visit evaluation patients and their family's caregivers. **Tools**: **first tool** included **part 1**: Socio-demographic characteristics and medical health history about patient, **Part 2**: The Barthel Index to assess degree of independence of the patient ,it is consist of three items **second tool** included **part 1**: post stroke care checklists to assess (exercise, medications, preventing another stroke, pressure ulcer, mobility and rehabilitation) **part 2**: post stroke complications checklists to assess (pneumonia, urinary tract infection and Deep venous thrombosis) (DVT). **Results**: the most of study sample are married while two third of sample has insufficient incomes to their family, two third of post stroke patients of study are affected by pneumonia, and half of study sample are complained from hypertension. Less than half of study sample are independent for total Barthel Index. **Conclusion**: The current study concluded that less than half of post stroke patients were complained from hypertension, while less half of post stroke patient in the present study sample were independent for feeding, also more than half of post-stroke caregivers gave patient medications on time. The most of stroke patients was suffering from depression and two third have urinary tract infection, the half of study sample were independent for total Barthel Index in spite of there were two third of studied sample were satisfied for total post stroke care . **Recommendation**: the study recommended that; health education with the preventive information especially at the primary level about the stroke, develop a team of discharge plan to be responsible about providing the patients and their family caregivers with the knowledge and practice about post stroke care.

Keywords: Family Caregivers, Home care, post stroke.

Introduction

Stroke is a medical emergency, the gap between recovery and impairment or death for people who had a stroke is measured in hours, it is critical for healthcare practitioners to have a basic awareness of stroke and how to respond to it as part of their daily routine (Taylor et al., 2019). Stroke is the major cause of adult disability and the second largest cause of death, it can cause tingling and spasms in the muscles, as well as a lack of ability to detect heat and cold in the body, mind, and emotions. Weakness or paralysis of the extremities, swelling of the arms or legs, and tight or painful joints are all possible side effects (Goudie, 2017).

A stroke can leave a person with a feeling of fatigue that makes daily work difficult. A stroke can have a serious impact on how the brain processes information, depending on where the damage occurred. Memory, learning ability, and general awareness of the environment can be compromised; it can also impair your ability to communicate through speech and writing. The ability to read and concentrate can also be compromised. Sleep disorders can lead to poor memory and cognition (Armstrong, 2018).

Pay interest to the symptoms and signs begin, the duration of time they were gift can have an effect on your remedy options: trouble with speaking and understanding, paralysis or numbness of the face, arm or leg, trouble with seeing in a single or each eyes, sudden, excessive headache,

which can be observed through vomiting, dizziness or altered attention and trouble with walking (Murano et al., 2019).

Healthy lifestyle which includes not smoking, maintaining a healthy weight, following a healthy diet, and daily exercise can reduce the risk of having a stroke to the half. The Dietary Approaches to Stop Hypertension (DASH) diet is high in fruits and vegetables, moderate in low-fat dairy products, and low in animal protein and can lower the risk of stroke. Stroke risk screenings are an ideal opportunity to lower stroke risk by identifying people or groups of people who are at high risk for stroke. Patients and the community must be educated about recognition and prevention of stroke. Research findings suggest that low-dose aspirin may lower the risk of stroke in women who are at risk (Boehme et al., 2017).

Caregiver is someone who accountable for getting to the wishes of a baby or based adult. A caregiver can offer a huge variety of service, relying at the diploma of disability, economic situation and living environment of the person disability (Reynolds et al., 2019).

The responsibilities of informal caregivers are as follows: Personal care such as (hygiene, nutrition, home care such as cleaning and meal preparation), auxiliary care such as (shopping and transportation), care such as (counseling and emotional support, conversation), and (Care plans such as

(establishing and coordinating support for patients) (Brugiavini et al., 2019).

The main goal of teaching community care is to help stroke victims and caregivers achieve independence. The quality of education enhances the ability of clients and families to better care for their needs. Better results can be obtained by considering the client's learning needs in the context of the client's family and community. These results include improved care, ease of recovery, reduced complications of the disease and return to activities of daily living (ADLS) (Orchard et al., 2017)

The Community health nurse in home health care (HHC) is the roles of clinician that provide direct care to the clients and families, which include educator, investigator, administrator and consultant are seen in home healthcare. The experienced home health nurse manager or the administrator can fulfill this role (Mixon et al., 2020).

Aim of the Study

The aim of this study was to assess the care provided by family caregivers for post stroke patient at home

Research Question:

- What is the health care provided by family caregivers for post stroke patient at home
- Is there relationship between the care provided by family caregivers for poststroke patient at home and their socio-demographic characteristics?

Significance of the study

Globally, 70% of strokes and 87% of both stroke-related deaths and disability-adjusted life years occur in low- and middle-income countries. One in six people worldwide will have a stroke in their lifetime. Fifteen million people worldwide suffer a stroke each year and 5.8 million people die from its (Ramachandran & Rogers-R., 2019). Nearly seventy million people worldwide are affected with stroke annually with a mortality rate among them up to six million and another six million had left with permanent disability.

In Egypt, there are 14.8% of people are suffering from stroke, and 1600 cases died every year from stroke. About 47% of patient had at least two or more modifiable risk factors smoking, physical inactivity and hypertension (Aziz et al., 2019).

Post-stroke dementia was detected in 20.8% of patient, it was recorded more in old ages, illiterates, unmarried, unemployed, and those with recurrent stroke and with cerebral infarction. Post-stroke dementia is high in Egypt, especially in those with illiteracy, brain atrophy, severe strokes, and those presented with hemiplegia, sphincter affection, abnormal gait, and psychotic features (Al Fawal et al., 2021).

SUBJECT and METHODS

Aim of the Study

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Research Design:

A descriptive research design was utilized in this study.

Setting:

This study was conducted at Minia University Hospital Neurology Outpatient Department. The hospital is located on the west bank of the Nile, opposite the Nile Upper Bridge, south of Minia city. The areas offered were on the western side of the city of Minia and the province of Minia. The hospital consists of two parts, the education part consists of classes for the education and training of medical and nursing students, and the second part consists of 37 outpatient departments and 27 inpatient departments in various specialties. Investigators choose this hospital because it has more cases than any other hospital. The outpatient clinic for nervous system patients in a university hospital works every Saturday and Wednesday and has three doctors (one senior and two juniors) and four nurses every day. Most cases of different age groups, most strokes, occur in the elderly and follow postoperative cases after neurosurgery. Servants of neurological clinic are serving neurological and stroke cases, providing appropriate treatment, wound care for postoperative cases, and referring cases to physiotherapy for rehabilitation

Sample:

Purposive sampling of 180 patients who matched the research criteria was selected at outpatient stroke clinics. The sample was collected through six months from (from first July to the end December 2020). The investigator used to attend of the medical clinic in the Neurology department to follow up the cases, the average number of cases present daily in the clinic is approximately 150 cases that come to follow up. The clinic time was from 9 AM in the morning until 2 PM

Tool of data collection:

Tools were adapted by investigator and it was a structured interviewing assessment questionnaire which is consisted of **two tools**:

- **1st tool**: consists of two parts :
- **part1: Personal & medical Data Questionnaire**: Structured Interviewing Questionnaire Form consisted of 15 closed ended questions: The questionnaire includes: Socio-Demographic characteristics: Of post-stroke patients, this part is covered (i.e., age, sex, marital status & education). The medical health history of post-stroke patients, it covers the medical diagnosis, date of occurrence, number of recurrence, and types of medications and present complaints (Cornelia et al., 2018).
- **Part 2: The Barthel ADL Index**: It developed by Barthel (1965) to assess the degree of independence of the patient it is consist of 10 items (transferring, bathing, dressing, toileting, continence, feeding, stairs, exercises, and grooming) (Ohshima et al., 2017).

2nd tool: consists of two parts :

- **Part 1: post stroke care checklists** to assess exercise, medications, preventing another stroke, pressure ulcer, mobility and rehabilitation (Bjornestad, et al., 2018).

- **Part 2: Post stroke complications checklists** to assess e.g. pneumonia, and urinary tract Infection and Deep venous thrombosis (DVT) (WHO) 2017.

Scoring system

- **The Barthel activity of daily living Index (ADL):** includes structured face to face interviewing questionnaire consisted. Total possible scores range from (0- 7), with lower scores indicating increased disability Activities of day by day dwelling rating (0-20). Each object scored as follows (0-7) for Dependent, (8-12) for Assisted unbiased with assistant and (13-20) for Independent (Ohshima et al., 2017)
- **Post stroke care checklists** each item scored as follows: (1) For did not perform (2) for perform incomplete (3) For perform correct and complete the total score is (50-150) categorized as unsatisfied caregiver (50-100) and satisfied caregiver (100-150) (Bjornestad, et al., 2018).
- **Post stroke complication checklist questionnaire** includes structured face to face consisted of 15 closed ended questions about complications related to stroke. The total score is categorized as follows: (7-14), (10-7) for unsatisfied client, (11-14) for satisfied client (Ohura, et al., 2017).

Validity of Content:

The content validity of the data collection tools as a post stroke patient personal data questionnaire, the Barthel Index (activity of daily living) tool questionnaire and a post stroke care checklist. tools were submitted to five experts in community health nursing to test their validity. The tools were examined for content coverage, sequence of items, clarity, relevance, applicability, wording, length, format, and overall appearance. Based on experts' comments and recommendations; minor modifications had been made such as rephrasing and rearrangements of some sentences.

Reliability

Internal consistency of interview questionnaire was assessed with the Cronbach's alpha coefficient. Cronbach's alpha coefficient of 0.00 indicates no reliability and a coefficient of 1.00 indicates perfect reliability. However, a reliability coefficient of 0.70 is acceptable. The reliability testing was performed for each tool and the results were as represented in table (A).

Table (A): Cronbach's alpha for each tool:

Tool title	Cronbach's Alpha
Post stroke complications checklist tool	0.785
The Barthel activity of daily living (ADL) Index tool	0.833
Post stroke care checklist tool	0.565

Pilot Study

A pilot study will be conducted on 10 % of the sample to test study data collection tools in terms of their clarity, applicability, and time required to fulfill it. According to the results, based on the result of pilot study, the necessary modification in the items was done and included in the study.

Ethical Consideration

A written approval obtained from the ethics and research committee of the Faculty of Nursing, Mina University. Oral consent obtained from each participant after explaining the nature & objectives of the study to gain their cooperation. Each assessment sheet was coded and subjects' names were not appearing on the sheets for the purpose of anonymity and confidentiality. Subjects were free to withdraw from the study at any time.

Study Procedure

Permission to conduct the study was obtained from the manager of Minia University Hospital after explaining the importance and purpose of the study and obtained all permissions to collect data. The data were collected through six months from the beginning of July to the ending of December 2020. All needed sheets of the tool were printed, and data were collected from the caregivers. The investigator was meeting the patients and their caregivers in the clinic of nervous system patients in a university hospital that works every Saturday and Wednesday and has three doctors.

After consulting the doctors, I choose the cases based on the criteria shown in the study, if patient is able to check the form by himself or his caregiver Purpose of the study was explained to the caregivers before starting the interview where each caregiver was interviewed individually. Each caregiver took around 45: 60 minute to fill the tool. The investigator read questions and waits until caregivers complete the questionnaire for illiterate caregivers, while caregivers who read and write took questionnaire and filled it by themselves.

Questionnaire took about 60 minute for illiterate caregivers and 45-50 for educated caregivers to complete the tool. The investigator filled (3-5) tools from caregivers daily. Data was collected regarding patients' demographic characteristics, clinical data, knowledge regarding stroke and life style modifications, and factors affecting compliance among patients suffering from recurrent stroke through stroke patients' structured interview questionnaire. Then the investigator determined relation between compliance with life style modifications among patients suffering from cerebrovascular stroke.

Statistical analysis

The data will be tabulated and analyzed by using "statistical package for the social science" (SPSS), descriptive statistics will be utilized as, Frequency, percentage, mean and standard deviation. Qualitative variables were compared using Chi-square test Pearson correlation. P-value less 0.05 was considered as statically significant

Results

Table (1): Distribution of studied caregiver according to demographic characteristics at Minia University Hospital (2020) (N=180).

Demographic characteristics		No.	%
Age/ years	40-45	31	17.2
	45-50	50	27.8
	50-55	49	27.2
	55-60	50	27.8
	Mean ± SD = 51.7 ± 6.7 year		
Gender	Male	105	58.3
	Female	75	41.7
Social status	Single	5	2.8
	Married	143	79.4
	Divorced	23	12.8
	Widowed	9	5.0
Education level	Illiterate	95	52.8
	Reading and writing	73	40.6
	University education	12	6.7
Income of family	Sufficient	60	33.3
	Insufficient	120	66.7
Type of family	Extended	170	94.4
	Nuclear	10	5.6
Number of family	2-3	32	17.8
	4-5	119	66.1
	>5	29	16.1

Table (1) summarizes that, 53.2% of study sample their age ranges from 45:50 and 55:60 years old, with the Mean ± SD = 51.7 ± 6.7 year, 79% of them are married, 5% are widowed, 52.8 of them are illiterate, 6.7% has university education, 94% are extended families while 66.7% have insufficient income to their family and 66.1% of the client numbers of family is 4-5

Table (2): Distribution of post-stroke patients according to medical history at Minia University Hospital (2020) (N=180).

Medical History		No	%
Medical diagnosis	Stroke	87	48.3
	Brain tumor	15	8.3
	Bleeding	15	8.3
	Hypertension	63	35.0
Date of stroke	Less than 6 months	74	41.1
	From 6 months to 1 year	85	47.2
	From one to two years	16	8.9
	More than two year	5	2.8
Admitted in intensive care unit	Yes	58	32.8
	No	122	67.2
Duration of admission	Less than 6 months	24	13.3
	From 6 months to 1 year	17	9.4
	From one to two years	17	9.4
	Total	58	32.8
	Not admitted	122	67.2
Causes of admission	Stroke	11	6.1
	Medical cause	16	8.9
	Surgical cause	30	16.7
	Tumor	1	.6
	Total	58	32.2
Chronic diseases	Hypertension	88	48.9
	Low blood pressure	30	16.7
	Heart disease	36	20.0
	Diabetes diseases	12	6.7
	Hyper cholestriod	6	3.3
	Anemia	4	2.2
	Not at all	4	2.2
Smoking	Cigarette smoker	93	51.7
	Hookah smoked	39	21.7
	Both together	5	2.8

Medical History		No	%
Neurological disorder	Non-smoker	43	23.9
	Brain clots	40	22.2
	Brain bleeding	59	32.8
	Fits	21	11.7
	Atherosclerosis	11	6.1
	Brain tumor	49	27.2

Table (2) presents that, **48.9%** of post-stroke patients are diagnosed as stroke and 35% is hypertension complication led to stroke happening as regard to onset of diagnosis occurrence stroke, 47.2% of them the date of stroke from 6month to 1 year, 32.8 % of them admitted to ICU unit. Only 32.8% admits by brain bleeding disorders. Regarding the presence of chronic diseases 48.9% has hypertension and 20% has heart disease Also, 51.7% of them are cigarette smokers and 23.9 of them are non-smoker. Regarding the Neurological disorder 32.8% of them have brain bleeding and 22.2% of them have brain clots

Table (3): Distribution of study sample caregivers practices for post stroke patients Medication at Minia University Hospital (2020) (N=180).

	No.	%
Post stroke Practice (Medications)	23	12.8
Give patient Medication on time		
Did not performed	54	30.0
Performed incompletely	103	57.2
Use Medications in right way or methods		
Performed completely	28	15.6
Did not performed	70	38.9
Performed incompletely	82	45.6
Use right dose and route		
Performed completely	41	22.8
Did not performed	66	36.7
Performed incompletely	73	40.6
Regular diabetic and hypertensive drugs		
Performed completely	47	26.1
Did not performed	73	40.6
Performed incompletely	60	33.3
Storage of medications		
Performed completely	80	44.4
Did not performed	49	27.2
Performed incompletely	51	28.3
Performed completely		

Table (3) shows that, **57.2 %** of caregivers give patient medications on time but only 12.8 % of them don't. There are **45.6%** of study clients use it in right way administration to deal with their patients on the other hand there is 15.6 % doesn't. There are 40 % of study sample are on incomplete performance to diabetic and hypertensive drugs but 26 % of them are not completely, also **44.4%** of them are not storing medications correctly

Table (4): Correlation between Barthel Index and Care Giver Practice, Minia University Hospital (2020) (N=180).

Items	Care giver practice		
Barthel Index	P value	Pearson	Sig. (2)
	1	0.022	0.773

NS = not significance

P – value ≤ 0.05

*=significant

Table (4) shows that there is no significant correlation between Barthel Index and care giver practices (P= 0.773)

Table (5): Relation between Some Barthel Index and Socio Demographic Variables at Minia University Hospital (2020) (N=180).

Socio demographic variables	Dependent		Assisted		Independent		X	P-value
	No	%	No	%	No	%		
Age								
40 : 45	1	0.5	8	4.4	22	12.2	49.12	.128 NS
45 : 50	6	3.3	22	12.2	20	11.1		
50 : 55	1	0.5	30	16.6	18	10		
55 : 60	7	3.8	18	10	24	13.3		
Family member								
2-3	3	1.6	12	6.6	17	9.4	27.14	.402 NS
4-5	11	6.1	60	33.3	48	26.6		
> 5	1	0.5	9	5	19	10.5		
Medical diagnosis								
Stroke	8	4.4	43	23.8	36	20	94.89	.000*
Tumor	6	3.3	7	2.8	2	1.1		
Bleeding	1	0.5	9	5	5	2.7		
Hypertension	0	0	22	12.2	41	22.7		

Complication								
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NS = not significance

P – value ≤ 0.05

*=significant

Table (5) illustrates that, **there are statistical significance differences** between total BARTHEL INDEX practices among adult at home with medical diagnosis (p-value = 0.00)

Table (6): Relation between Selected Socio Demographic Variables and CareGivers Practices at Minia University Hospital (2020) (N=180).

Socio demographic variables	Unsatisfied		Satisfied		X	P-value
	No	%	No	%		
Social status						
Single	5	2.7	0	0	87.3 ^a	.928 NS
Married	128	71	15	8.3		
Divorced	23	12.7	0	0		
Windowed	8	4.4	1	0.5		
Intensive care unit (ICU) admission						
Yes	59	32.7	0	0	54.0 ^a	.027 *
No	105	58.3	16	8.8		
Educational level						
Illiterate	85	47.2	10	5.5	91.6	.945 NS
Reading	68	37.7	5	2.7		
University	11	6.1	1	0.5		

NS = not significance

*P – value ≤ 0.05

*=significant

Table (6): shows that, there are statistical significance differences between total practice patient care givers at home with ICU patient admission. It is observed that 58.3% of care givers having unsatisfactory practice level of care, (p-value = 0.027)

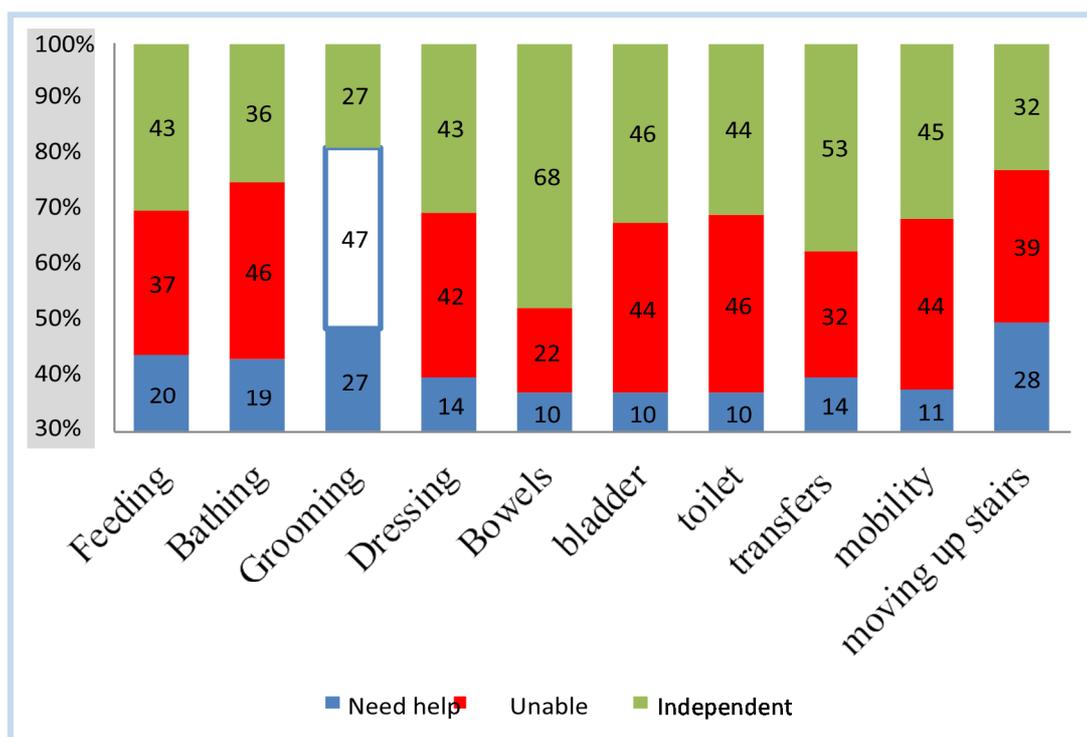


Figure (1): Distribution of study sample according to activity of daily living among patient stroke Barthel Index at Minia University Hospital (2020) (N=180).

Figure (1): explores that, 43.3% of post stroke patient are independent for feeding and 20% of them are unable, also 46.7 % of study clients need help during toilet and 26.7% unable, and 45.7% of them need help during bathing and shower time. As regard as 42.2 % of post stroke patient need help during dressing clothes but only 14.4 % of them is unable. On the other hand there are 14.4 % of study patients is dependent, and **44.4%** of them are independent to mobile while **39.4** % needs help during climbing stairs also 28.3% are unable to move up stairs

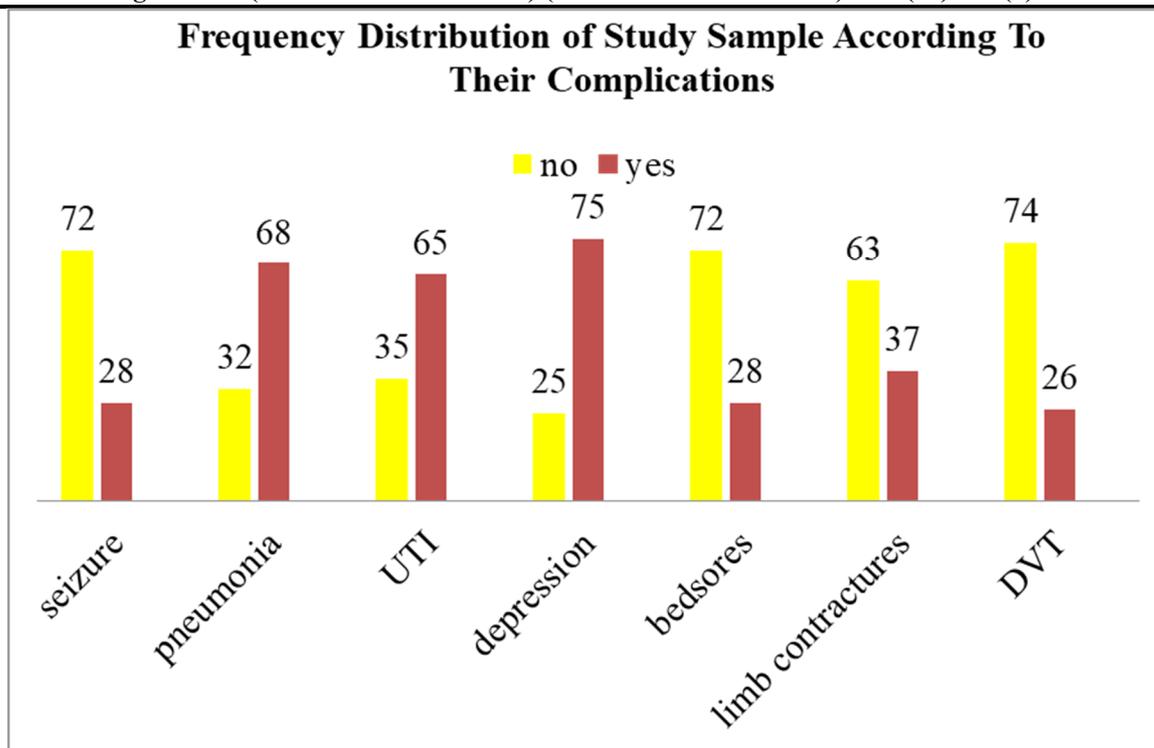


Figure (2): Frequency Distribution of Study Sample According To Their Complications at Minia University Hospital (2020) (N=180).

Figure (2) summarizes that 75% of the study sample become depressed as quickly as 68 % of them has infected by pneumonia .with inside the equal case 65% of submit stroke sufferers from urinary tract infection. How approximately that 72% of them have mattress sores and seizures post stroke, on the other hand 74% of study sample complain of deep venous thrombosis while 63 % of them have a limb contractions

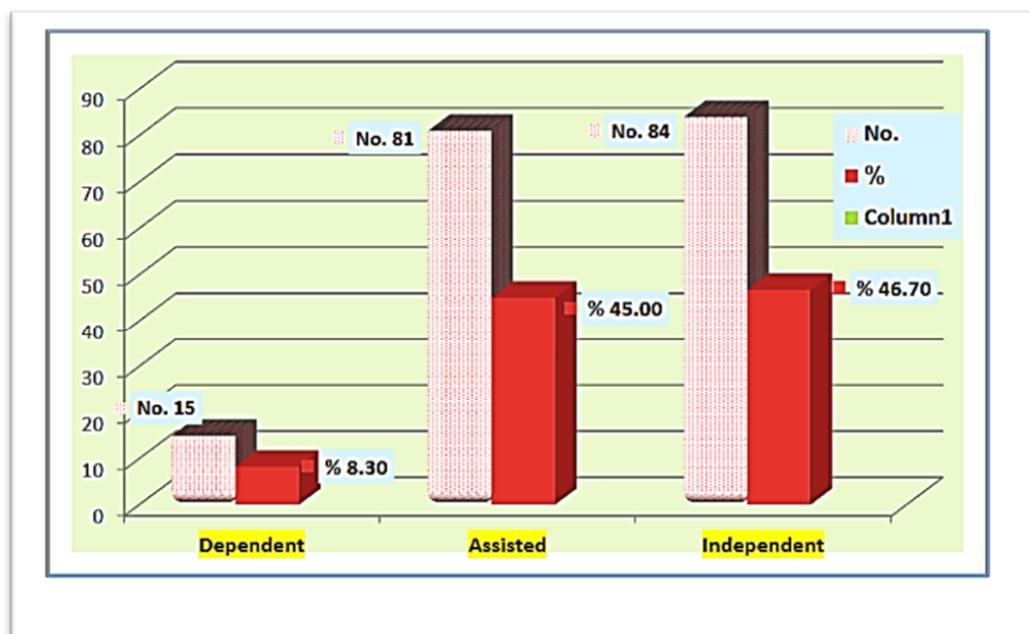


Figure (3): Frequency Distribution of Study Sample According Barthel Index at Minia University Hospital (2020) (N=180).

Figure (3) clears that 46.7% of my study sample are independent for total Barthel Index while 8.3% are dependent to others during doing their activities

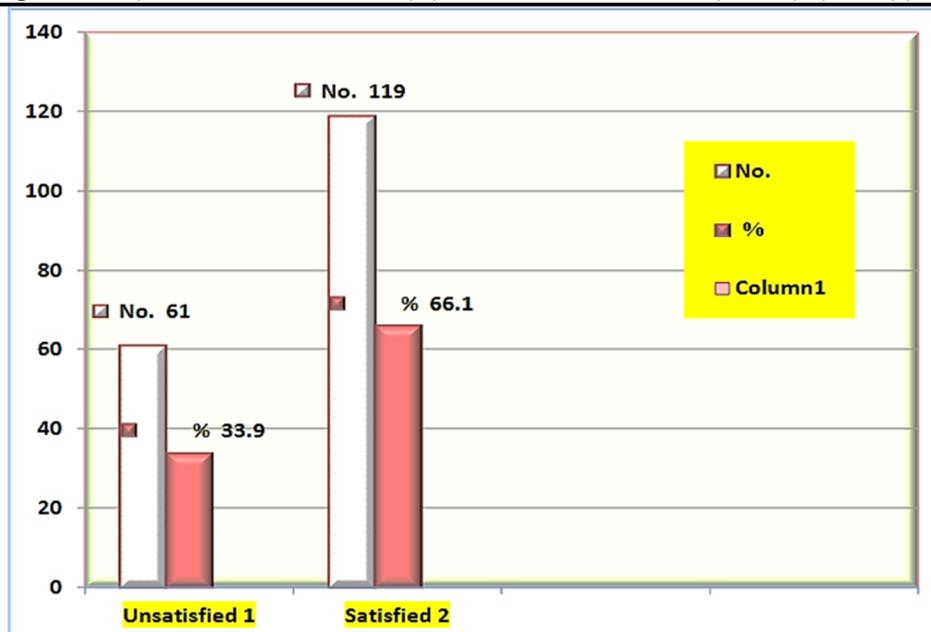


Figure (4): Frequency Distribution of study sample according Total post stroke care practices at Minia University Hospital (2020) (N=180).

Figure (4) shows that 66.1 % of my study sample are satisfied for total post stroke care while 33.9 % of them are unsatisfied to others during doing their activities.

Discussion

The present study result showed that, more than half of study sample were old age, the most of observed sample were married while two third of studied sample were have insufficient income to their family, the present results agree with **Wagachchige et al., (2018)**, who reported that more than half of study sample were old age most of them were have not enough money .The current study revealed that less than two third of stroke patients were males. The current result is consistent with **Fekadu et al., (2019)** who found that most of stroke patient were male. This reflects that males are more commonly devoted for managing home and works and for caring family members.

The present study results reflected that more than three quarters of the stroke patients were married. The present study similar findings as **Anderson et al., (2017)** who reported that less than three quarters of post stroke patient were married, Also, **Ayasrah et al., (2018)**, reported that the most of post stroke patient were married.

The current study results clarified that, more than half of stroke patients caregivers of the studied sample were living with their stroke patients adult and available at any time. This result agrees with **xing et al., (2020)**, who said that more than half of the studied samples were living with their stroke patients and availableat any time.

The present study results supplied that much less than half of my observed sample has been complained from high blood pressure as regard to onset of analysis the of prevalence the stroke so much less than one third of the study stroke patients admitted to ICU unit. This end result concurs with **Mwenda et al., (2019)** who pronounced that, hypertension and diabetes mellitus are stroke risk factors and correlated in patients.

The present study results explored that, less than half of study sample were independent for feeding, this result agrees with **Wilmskoetter et al., (2019)** who reported that forty four stroke patients at hospital discharge, the most of patients had oral intake restrictions and one quarter were

feeding tube dependent. From the investigator point of view this result study is due to most caregivers intended to show their care to client and because of the severity of disease attackedclient.

The present study results showed that more than half of post-stroke caregivers were giving patient medications on time, this referred that most of informal caregivers provide medication early after discharge. The investigator thinks this result may be accumulation of following doctor order and fear of deterioration.

The present study results showed that less than half of caregivers used medications in right way of administration, this result agreed with **Moon et al., (2016)** who reported that less than half of study cases take them correctly and understandingthe right way to administer them can reduce the risks. Also the present study result discovered that less than half of president study sample did not store medications correctly. This result agrees with **Parand et al.,(2018)**, who reported that potential drug administration errors take a look at end resultdetermined that more than half of my take a look at pattern did now no longer keep medicinal drugs correctly. This may be due to lack of the health education about medication on discharge.

The present study results summarized that the most of study sample was suffering from depression this come in agree with **Loh et al., (2017)** who reported that the high prevalence of depressive and anxiety symptoms among caregivers of stroke survivors. In my opinion, high rate of depression for post stroke patient may be related to long term complete bed ridden, social isolation and financial effort.

Regarding practices of caregivers the present study showed that two third have urinary tractinfection this come in agree with **Elnady et al., (2018)** who reported that "urinary tract infection was found in less than three quarters of their subjects.

Regarding practices of caregivers the existing examine confirmed that there's no sizable correlation among Barthel Index and caregiver practices. This come in agree

with de Weerd et al., (2016) who said there has been no sizable distinction among the median Barthel Index score at discharge from health center. The present study results identified that less than half of study sample were independent for total Barthel Index. These results agreed with xing et al., (2020) who revealed that more than half of stroke patients were totally independent in their patterns of daily activities.

The present study results cleared that half of study sample were independent for total Barthel Index this come in agree with Huenges et al., (2017) who said that almost two-thirds of patients were independent for the activities of daily livings (ADL) experienced problems of participation six months after stroke .

The present study results showed that two third of studied sample were satisfied for total post stroke care, this come in agree with Fujimaki et al., (2021) who said that "the vast majority of people who have had a stroke and their spouses were satisfied for total post stroke care -term satisfaction with aspects of "closeness" decline. In the investigator opinion , This may be due to the patients with stroke have distinct characteristics, they were not able to care for themselves, and some of them were not able to express their needs which leads caregivers to spend a lot of time with them and increase the amount of care giving by caregivers.

The present study results illustrated that there were statistical significance differences between total Barthel Index practices among adult at home with medical diagnosis .These results can be explained as the sit and the severity of the stroke detect the ability of the patient to practice the activity of daily living. There were statistical significance differences between total practice patient care givers at home with ICU patient admission, it was observed that two third of caregivers having unsatisfactory practice level of care, this contraindicated with Saab et al.,(2019), who said several easily measured variables were significantly associated with discharge to long term care versus home following stroke rehabilitation

From the investigator's point of view, which we need to bear in mind on this research, as a huge percentage of post-thrombotic patients suffer from signs and symptoms of complications, this suggests a loss of interest to them from the factor of view of caregivers or companions, and the proof is that the occurrence of urinary tract infections and the incidence of depression, as maximum The instances had depression, and it became discovered that post-stroke sufferers, at some stage in our follow-up as much as the instances, the disease ends in the incidence of bed sores from the social lifestyle of the sufferers' hygiene since the Egyptian lifestyle is involved with the cleanliness of the affected person first, even supposing it comes on the cost of treatment, wherein humans are in economic ways. We stay in a materialistic society, apart from a few social groups, that are involved with their presence in non-public hospitals

Conclusion

Based on the findings of the present study, it can be concluded that less than the half of post stroke patients were complained from hypertension, while less than half of post stroke patient were independent for feeding, Also more than half of post-stroke caregivers gave patient medications on time and less than half of them used medications in right way of administration, and half did not store medications correctly.

The most of stroke patients was suffering from depression and two third have urinary tract infection. As regarding relationships the half of study sample were independent for total Barthel Index in spite of there were two third of studied sample were satisfied for total post stroke care . There were statistical significance differences between total Barthel Index practices among adult at home with medical diagnosis but there wasn't significant correlation between Barthel Index and caregiver practices. Finally, there were statistical significance differences between total practice patient care givers at home with ICU patient admission

Recommendation

- Application and implementation of domestic fitness schooling through manner of approach of all stroke units, outpatient neurology clinics, and physiotherapy clinics.
- More researches are desired to investigate the various factors that boom caregiver burden and pain on the way to find out the proper solution.
- Spread of educational leaflets, posters, pamphlets, and booklets on recurrent cerebrovascular attacks and related way of life modifications ought to be established.
- Develop a crew of discharge plan in governmental and private hospitals to be accountable approximately imparting the sufferers and their own circle of relatives caregivers with the wished know-how and practice, which could be carried out at domestic.
- Provide the network with the preventive records measures about the stroke disease

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